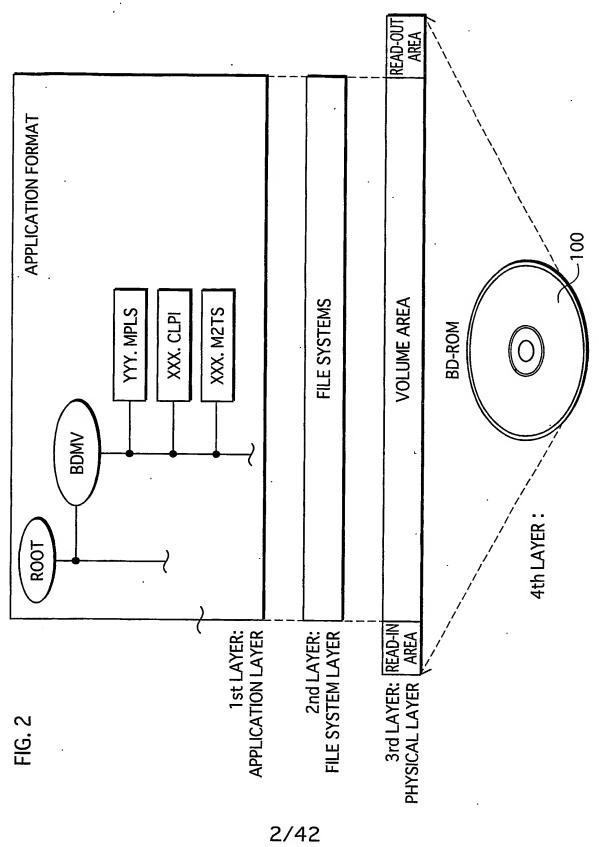
FIG. 1

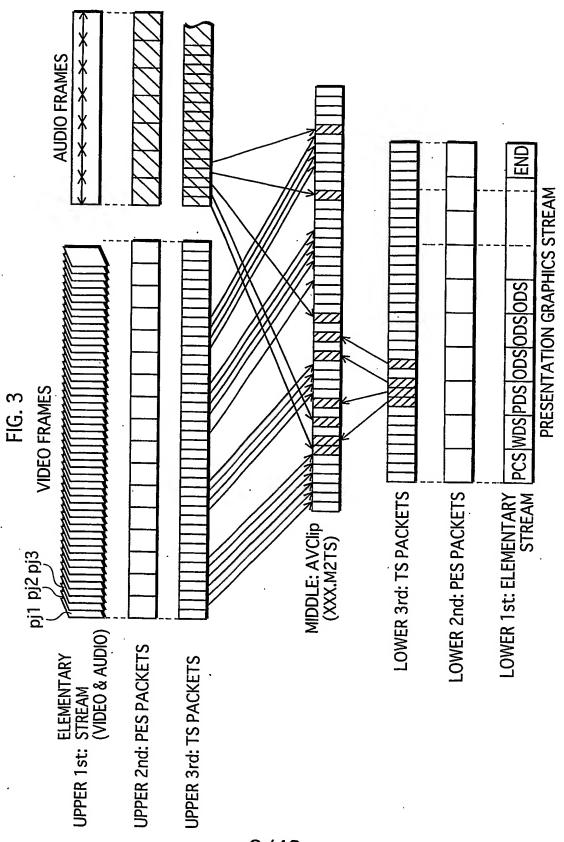
BD-ROM

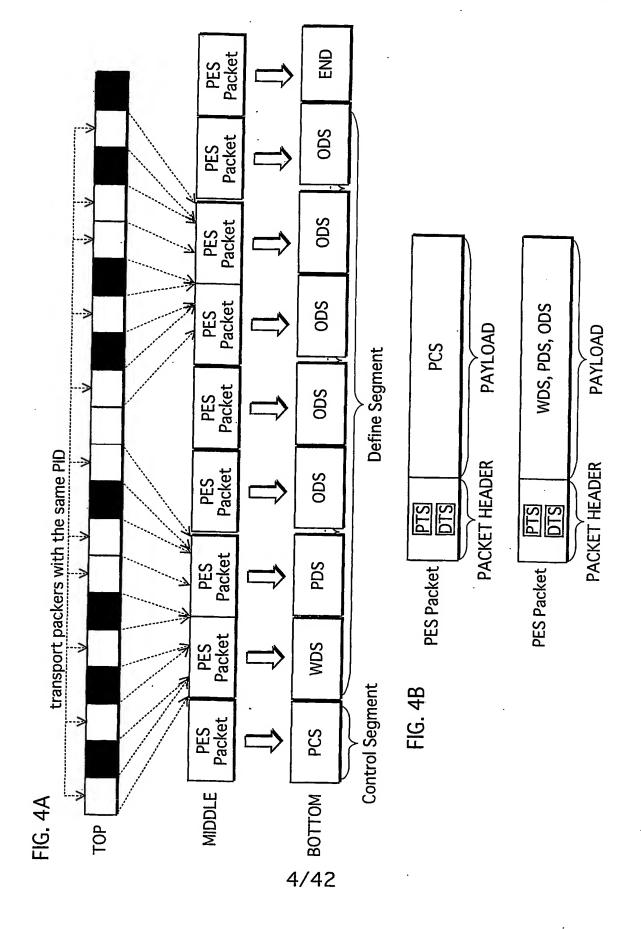
100

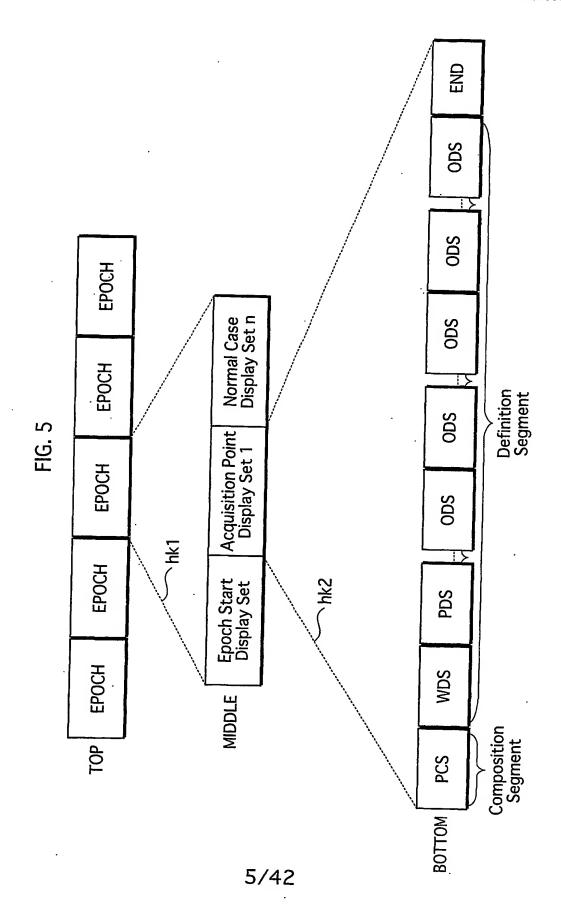
809

400









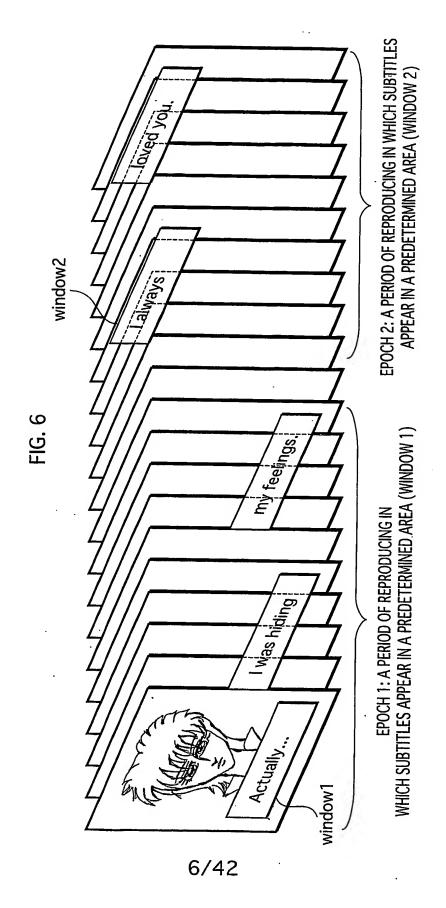
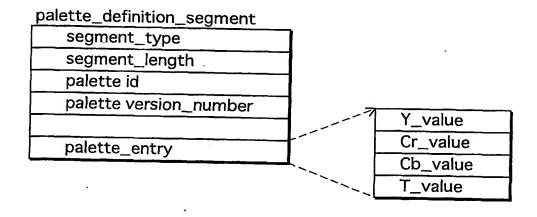


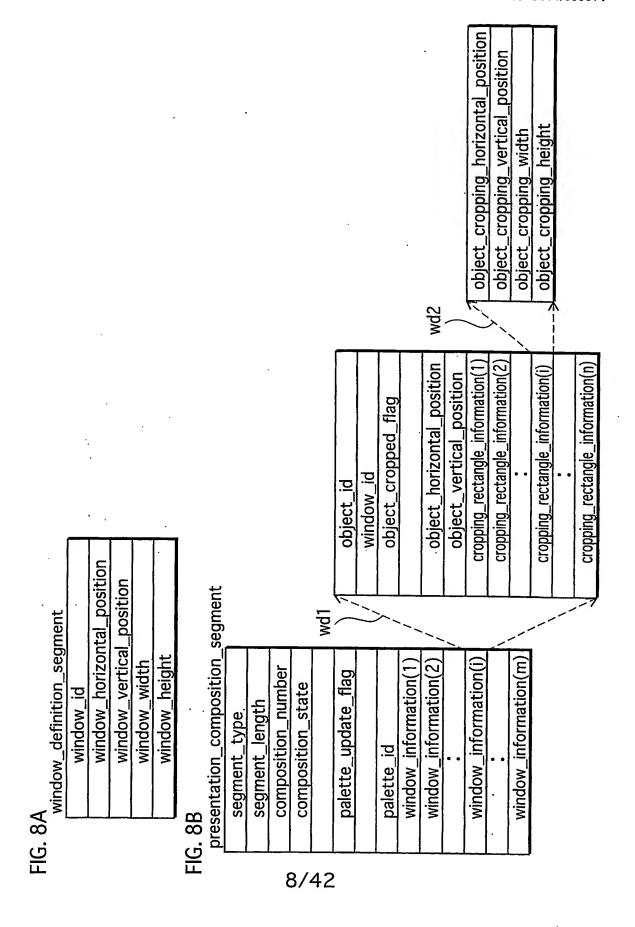
FIG. 7A

object_definition_segment
segment_type
segment_length
object_id
object_version_number
last in sequence flag
object_data_fragment

COMPRESSED GRAPHICS
OBJECT

FIG. 7B





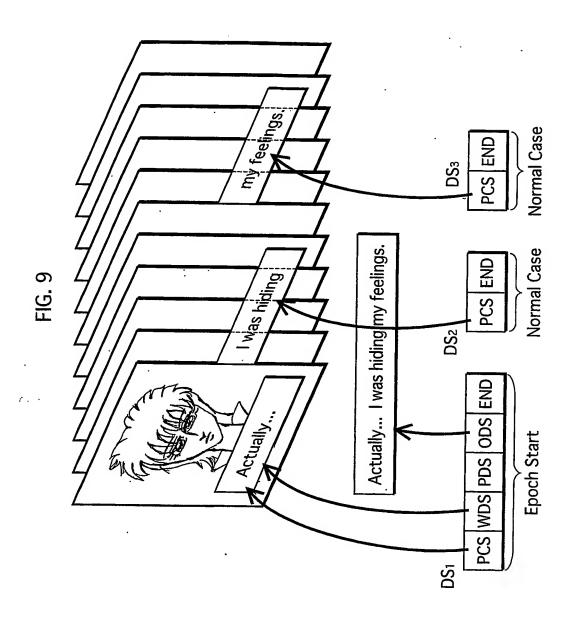


FIG. 10

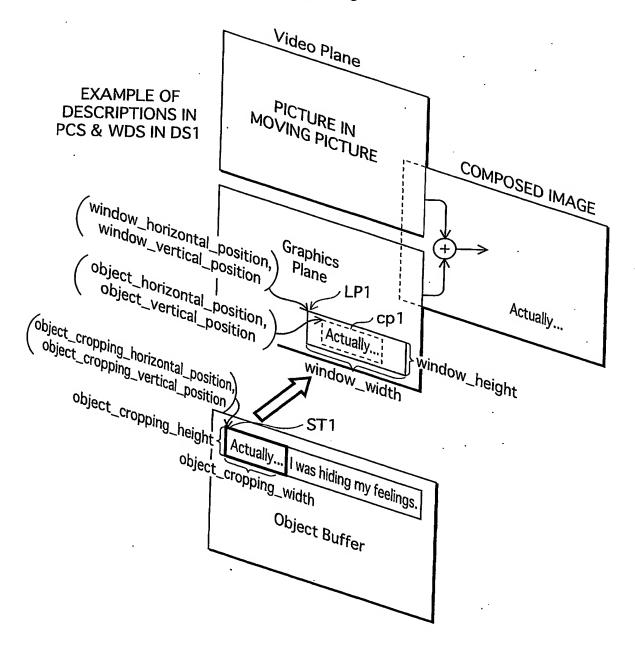


FIG. 11

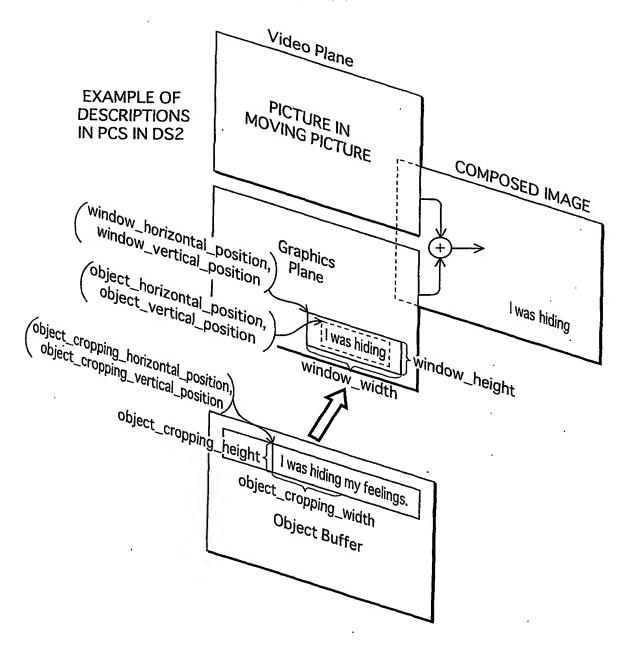
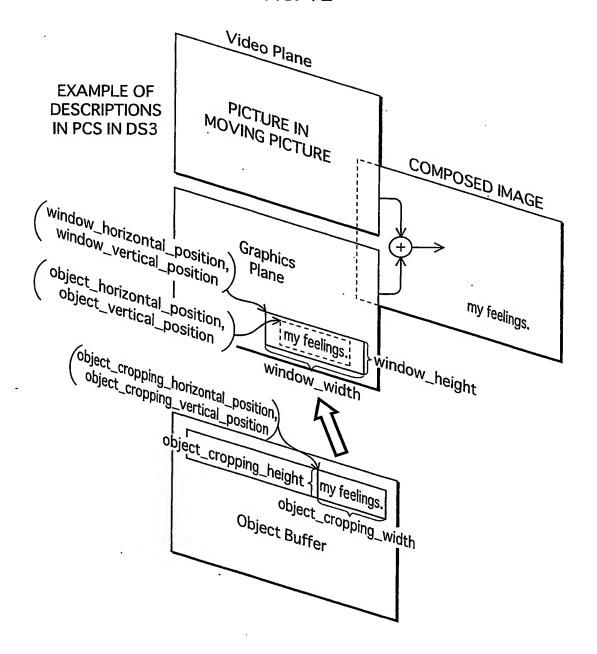
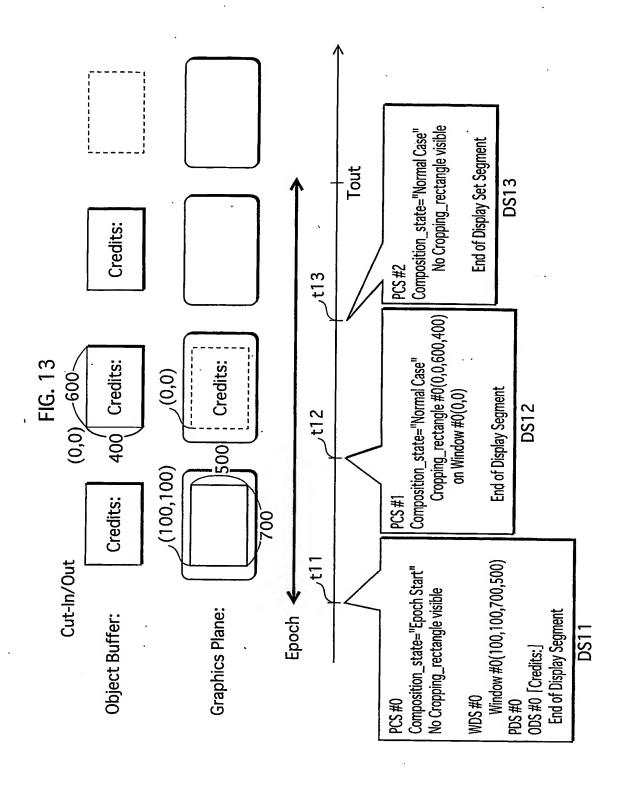
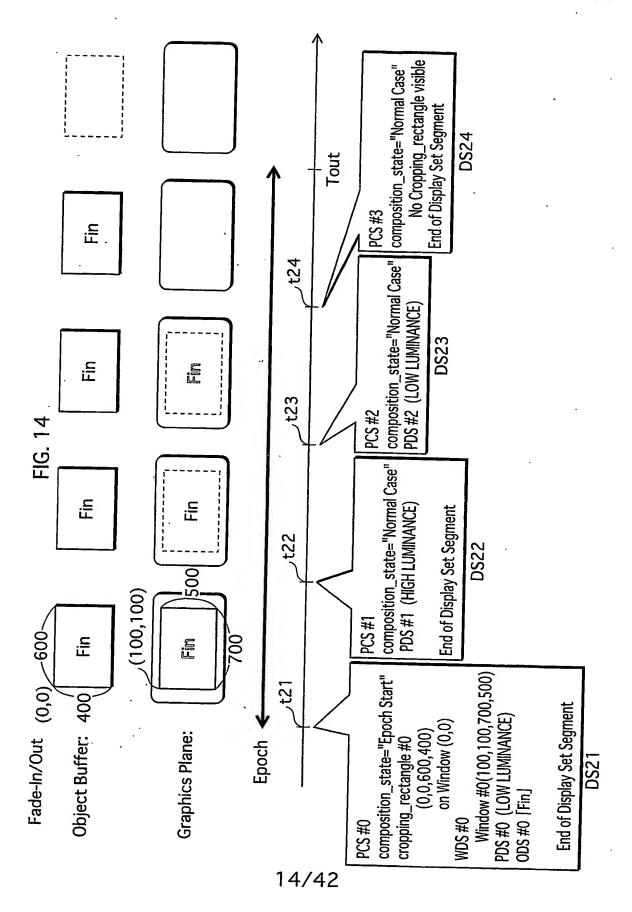
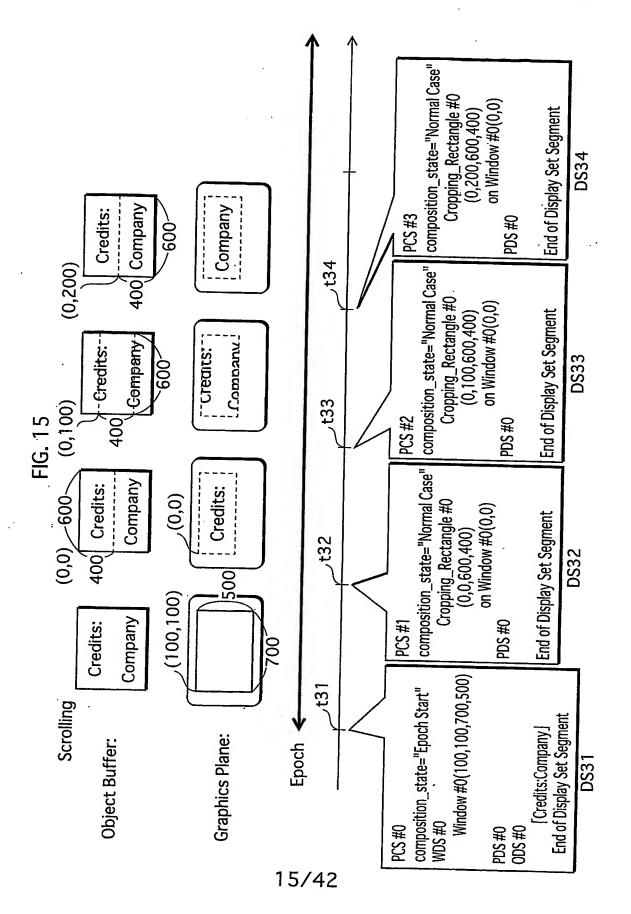


FIG. 12









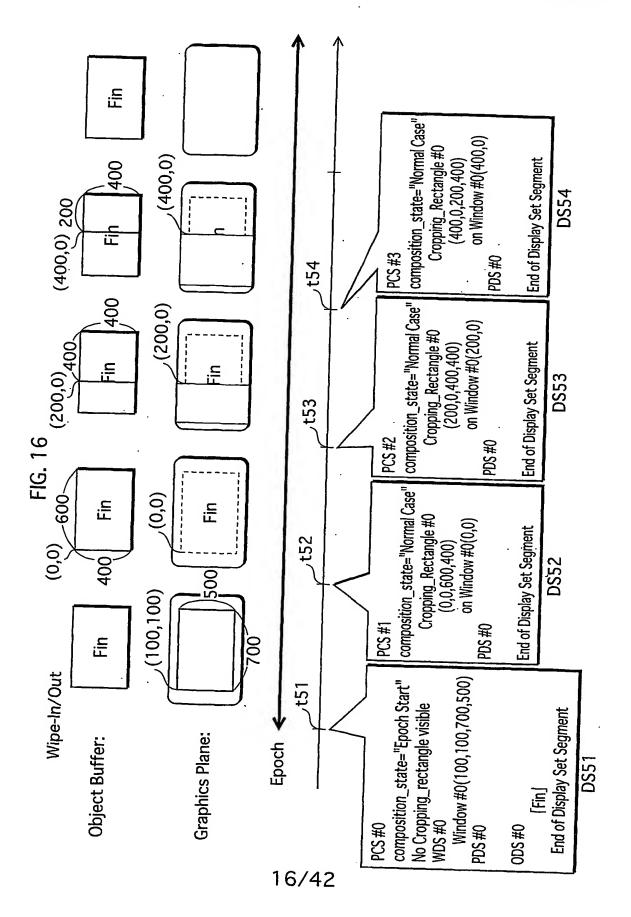
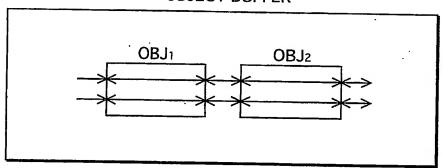
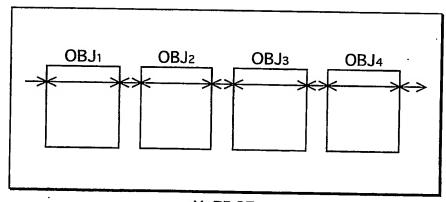


FIG. 17

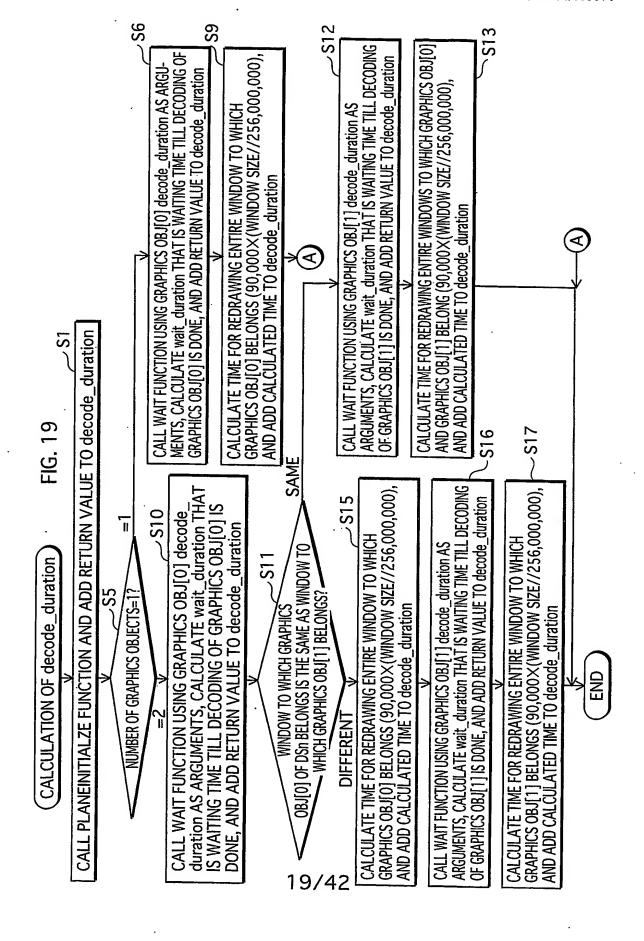
OBJECT BUFFER

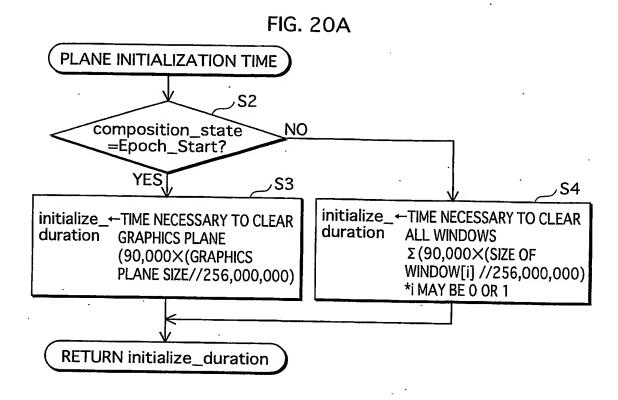




X: EDGE

```
FIG. 18 PTS( DSn[PCS)] >=DTS( DSn[PCS] )+DECODEDURATION( DSn )
        DECODEDURATION( DSn ) is calculated as follows:
    decode_duration = 0:
    decode_duration += PLANEINITIALIZATIONTIME( DSn );
    if( DSn. PCS. num_of_objects == 2 )
        decode_duration += WAIT( DSn, DSn. PCS. OBJ[0], decode_duration );
        if( DSn. PCS. OBJ[0]. window_id == DSn. PCS. OBJ[1]. window_id)
                decode_duration += WAIT( DSn, DSn. PCS. OBJ[1], decode_duration );
                decode_duration += 90000*(SIZE(DSn. PCS. OBJ[0]. window_id)//256*10^6);
        else
                decode_duration += 90000*( SIZE( DSn. PCS. OBJ[0]. window_id )//256*10^6 );
                decode_duration += WAIT( DSn, DSn. PCS. OBJ[1], decode_duration );
                decode_duration += 90000*(SiZE(DSn. PCS. OBJ[1]. window_id)//256*10^6);
    else if( DSn. PCS. num_of_objects == 1 )
       decode_duration += WAIT( DSn, DSn. PCS. OBJ[0], decode_duration );
       decode_duration += 90000*(SIZE(DSn. PCS. OBJ[0]. window_id)//256*10^6);
    return decode_duration;
       PLANEINITIALIZATIONTIME( DSn ) is calculated as follows:
   initialize duration=0:
   if( DSn. PCS. composition_state= = EPOCH_START )
      initjalize_duration = 90000*( 8*video_width*video_height//256*106);
   else
       for (i=0; i < WDS. num_windows: i++)
               if( EMPTY(DSn.WDS.WIN[i],DSn ) )
                     initialize_duration += 90000*(SIZE(DSn. WDS. WIN[i])//256*10^6);
   return initialize_duration:
       WAIT( DSn, OBJ, current_duration ) is calculated as follows:
   wait_duration = 0:
   if( EXISTS( OBJ. object_is, DSn ) )
       object_definition_ready_time = PTS( GET( OBJ. object_id. DSn ) );
      current_time = DTS( DSn. PCS )+current_duration;
      if( current_time < object_definition_ready_time )
              wait_duration += object_definition_ready_time - current_time );
   return wait_duration:
                                   18/42
```





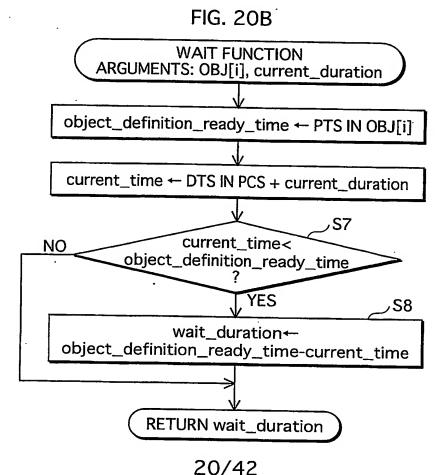
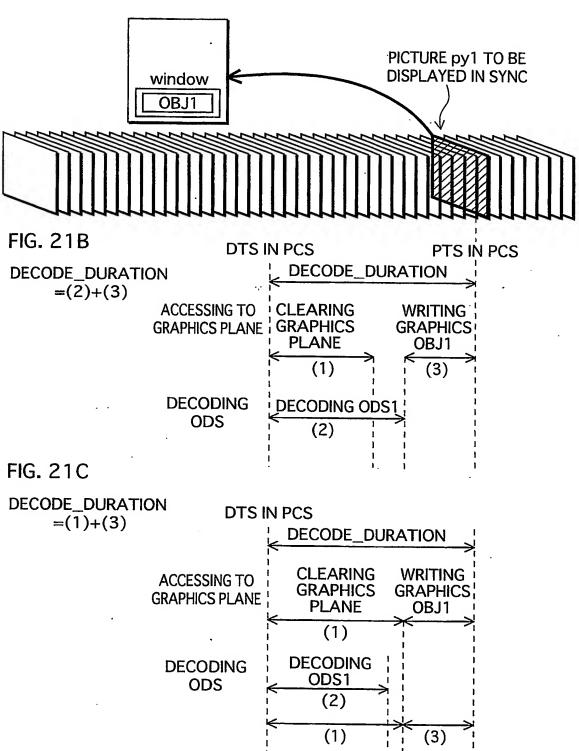
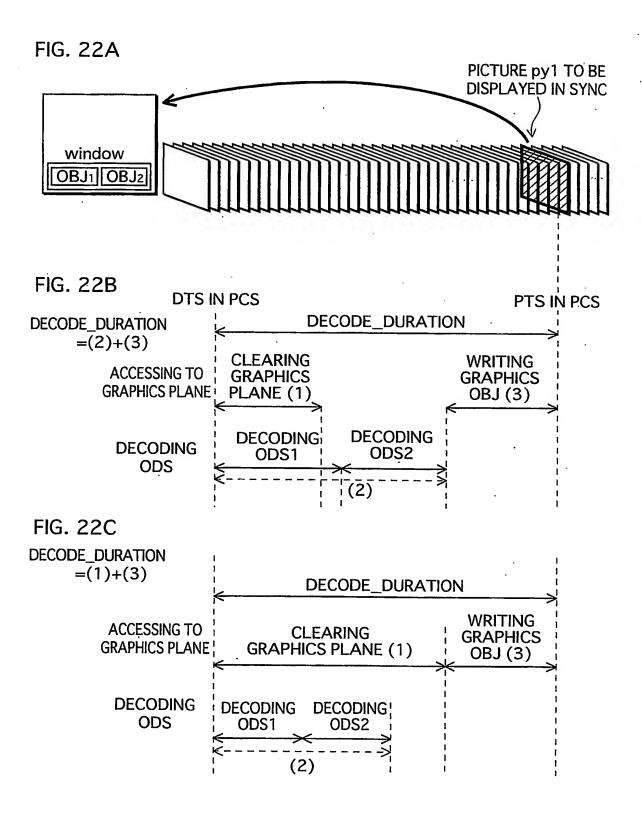
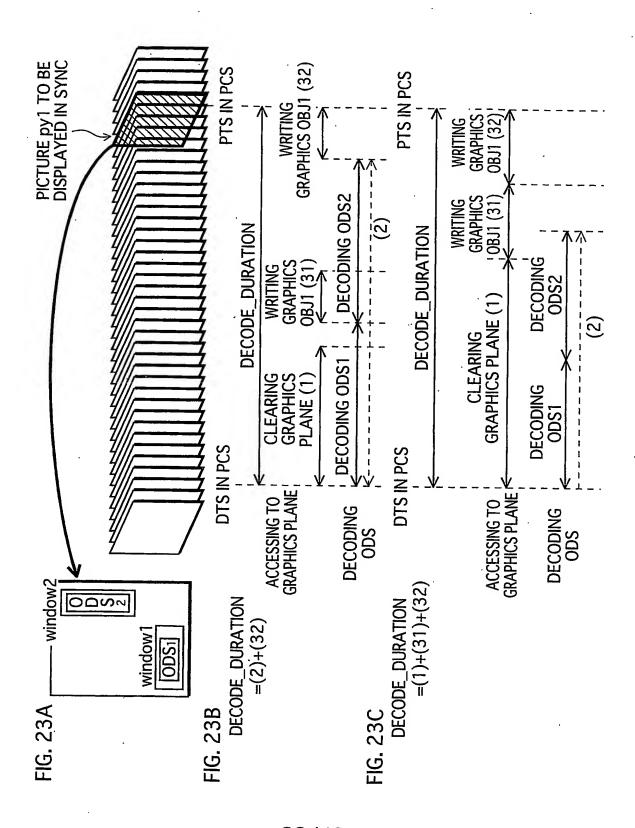


FIG. 21A



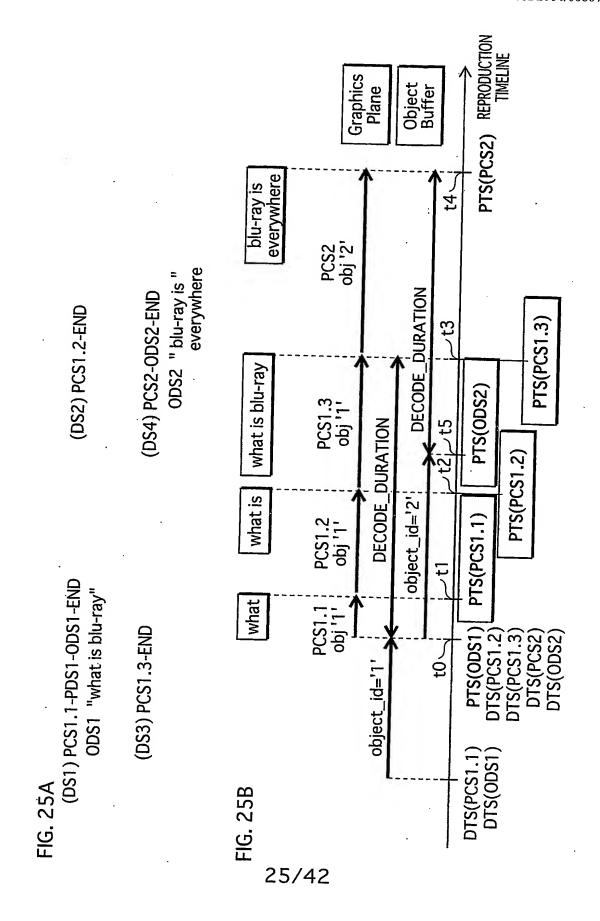


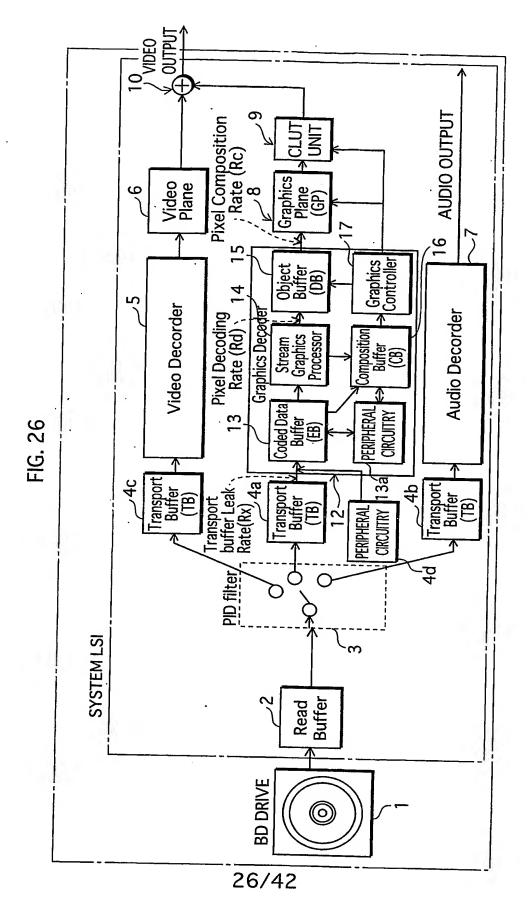


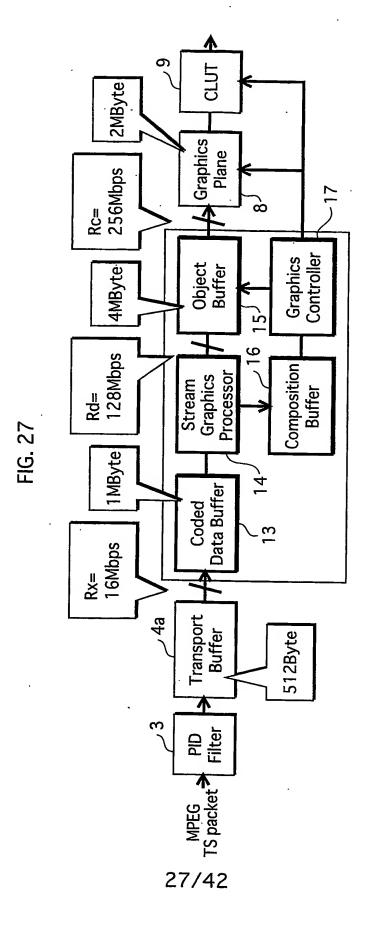
23/42

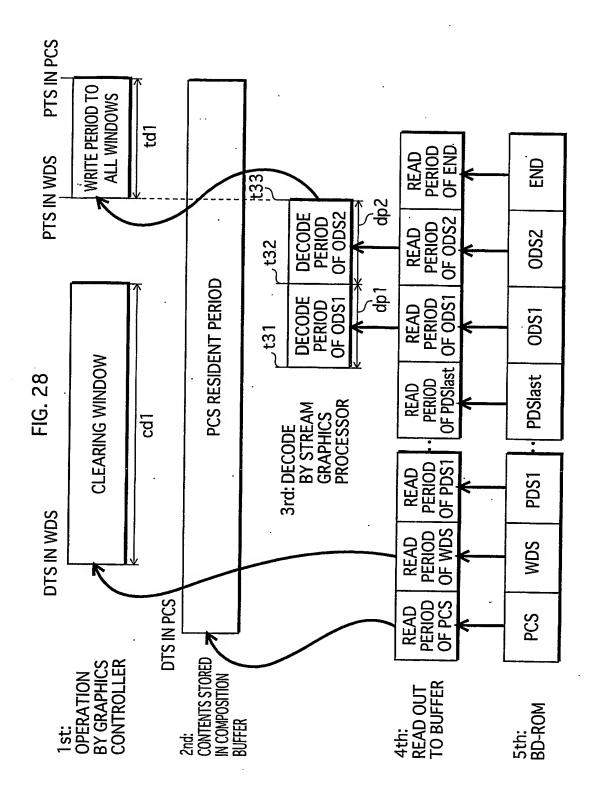
what is blurray FIG. 24 REPRODUCTION TIMELINE

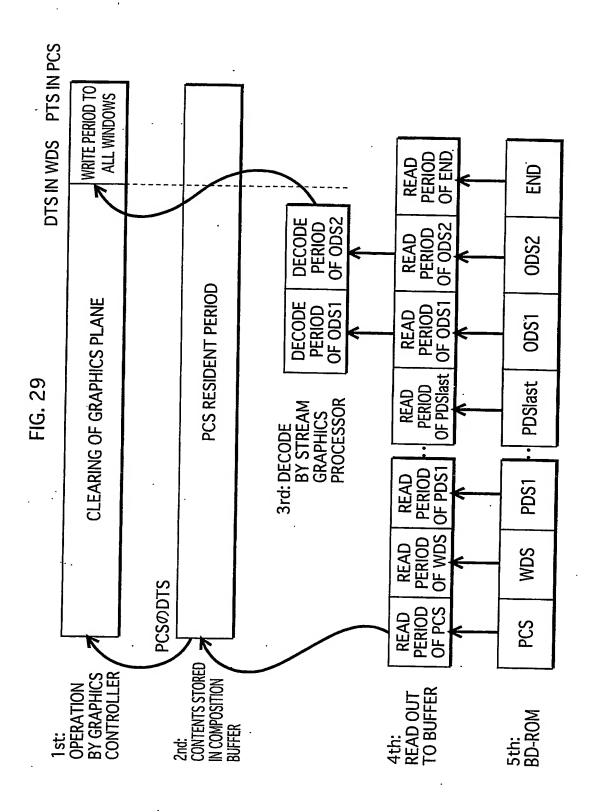
24/42

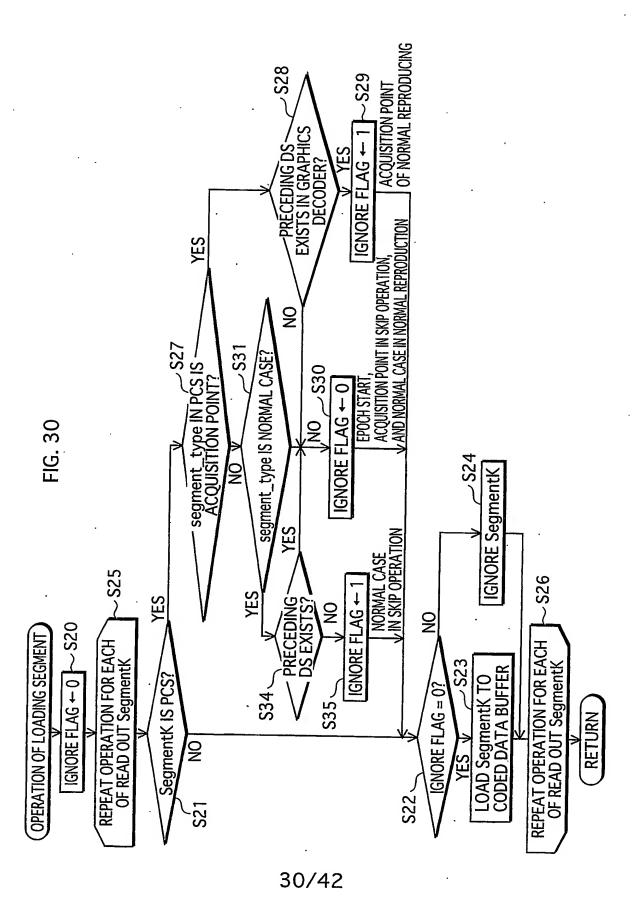


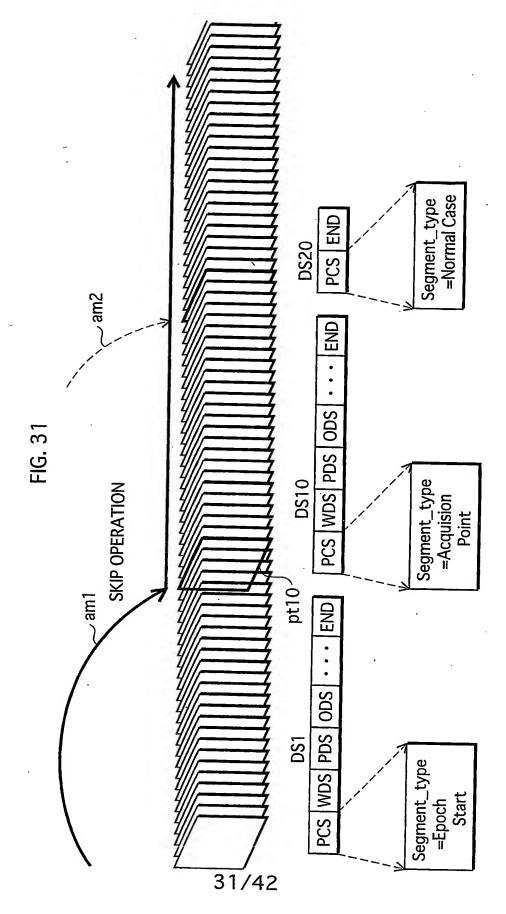


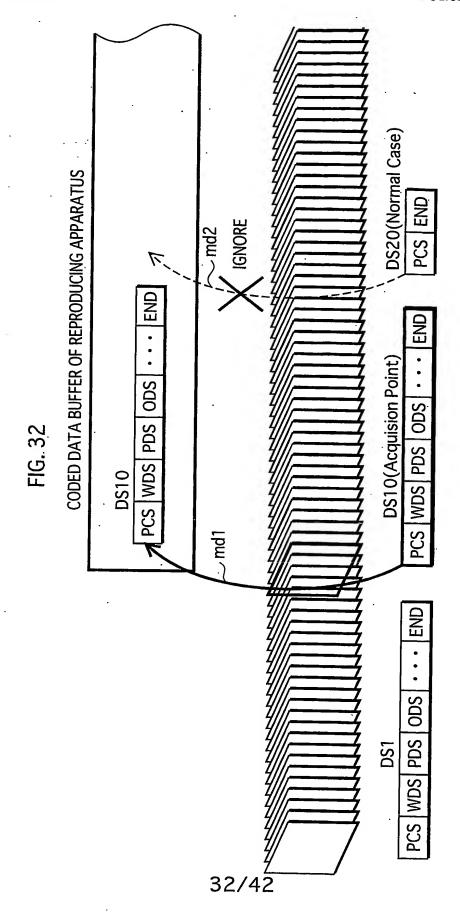






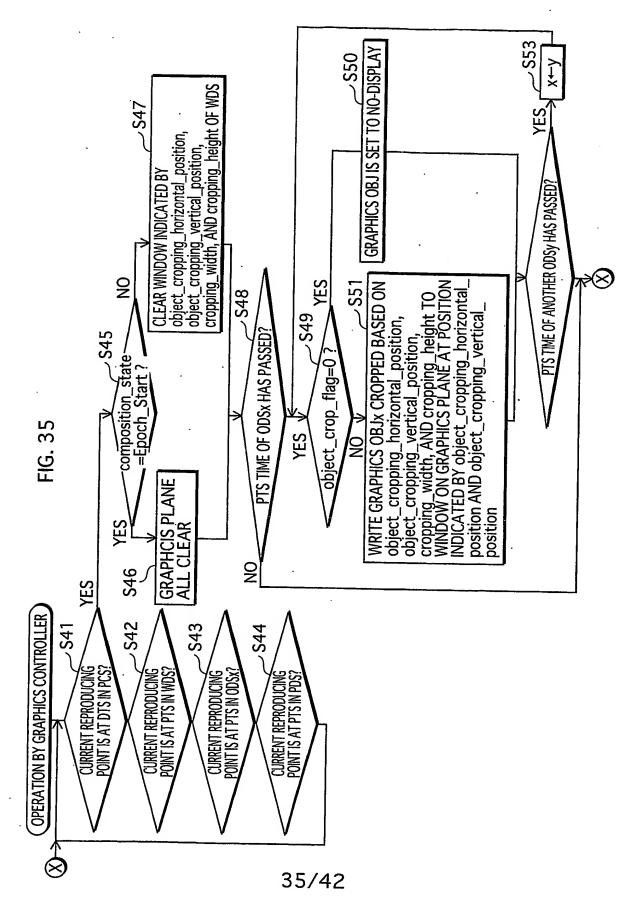


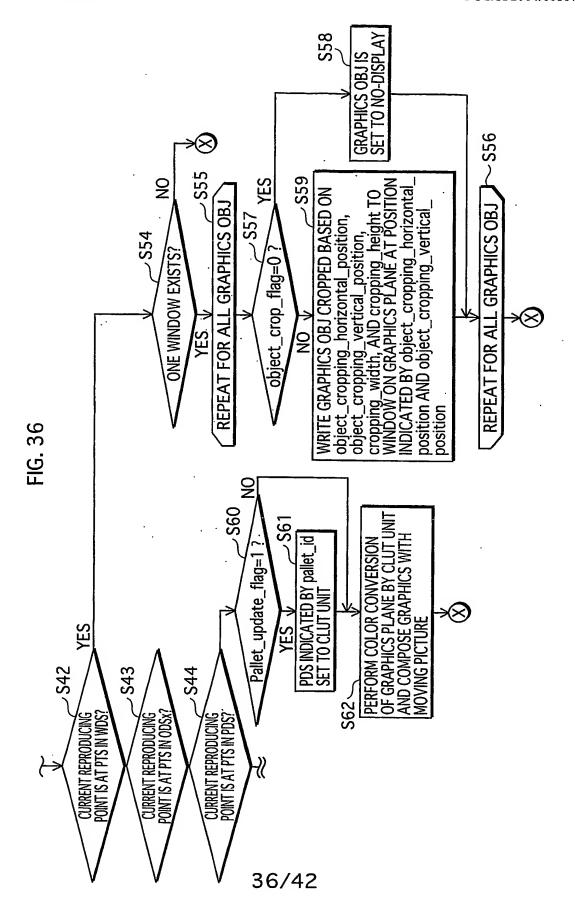




Segment_type =Normal Case END **DS20** PCS END NORMAL REPRODUCTION WDS PDS ODS FIG. 33 Segment_type =Acquision Point DS10 PCS END ODS WDS PDS DS1 Segment_type =Epoch Start PCS 33/42

END PCS **DS20** ~ rd3 CODED DATA BUFFER OF REPRODUCING APPARATUS END GNORE DS AND NOT LOADING DS10 PCS | WDS | PDS | ODS | FIG. 34 \sim rd2 END END ODS DS1 PDS PCS |WDS | PDS | ODS PCS | WDS DS1 MEMORY LOAD





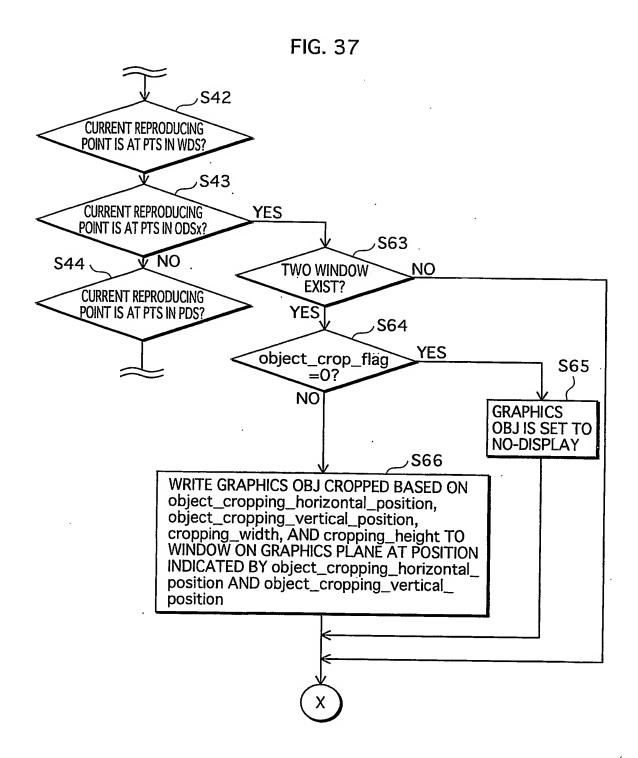
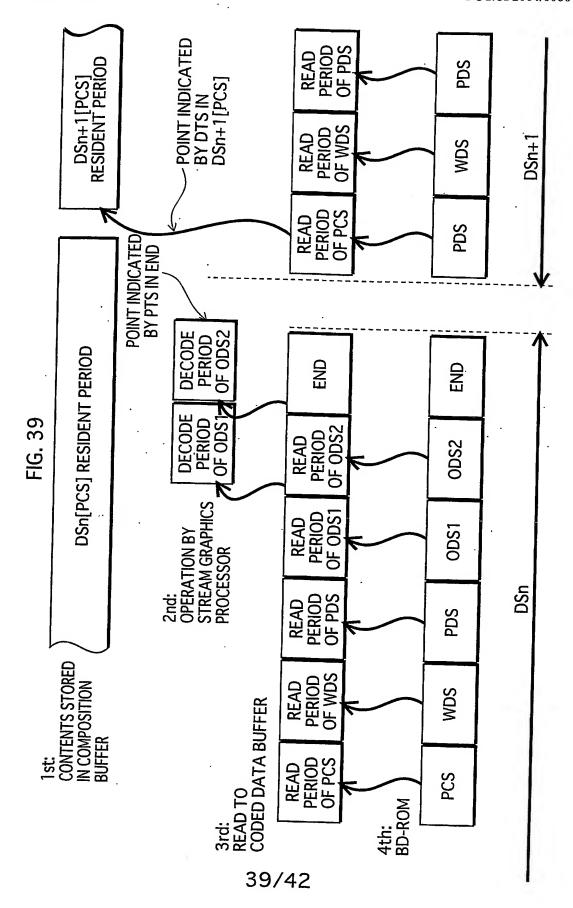
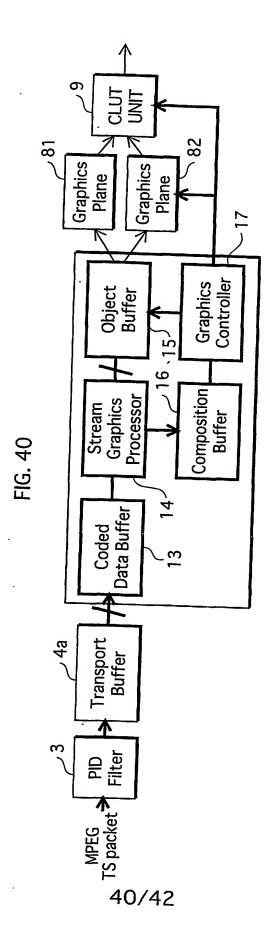
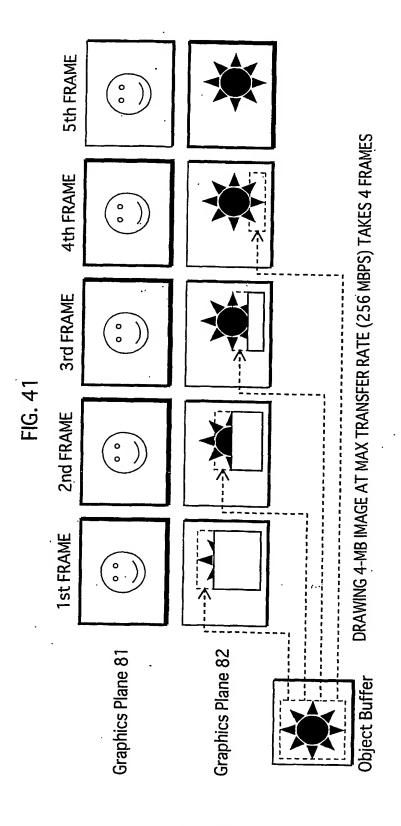


FIG. 38 PTS IN PTS IN PDS1 **PDSlast** 1st: **CLUT UNIT** SETTING **SETTING** SETTING OF PDS1 OF PDSlast DTS IN **WDS** 2nd: **OPERATION** BY GRAPHICS **CLEARING WINDOW** CONTROLLER DTS IN ·up2 ~up3 **PCS** 3rd: **CONTENTS STORED** IN COMPOSITION PCS RESIDENT PERIOD **BUFFER DECODE** DECODE 4th PERIOD **PERIOD** OF ODS1 OF ODS2 5th: READ **READ** READ **READ OUT TO** READ **READ READ** PERIOD PERIOD PERIOD **CODED DATA PERIOD PERIOD PERIOD** OF PCS OF WDS OF PDS1 BUFFER OF PDSlast | OF ODS1 OF ODS2 6th: **PCS WDS** PDS1 **PDSlast BD-ROM** ODS₁ ODS2

38/42







41/42

WO 2004/098193

